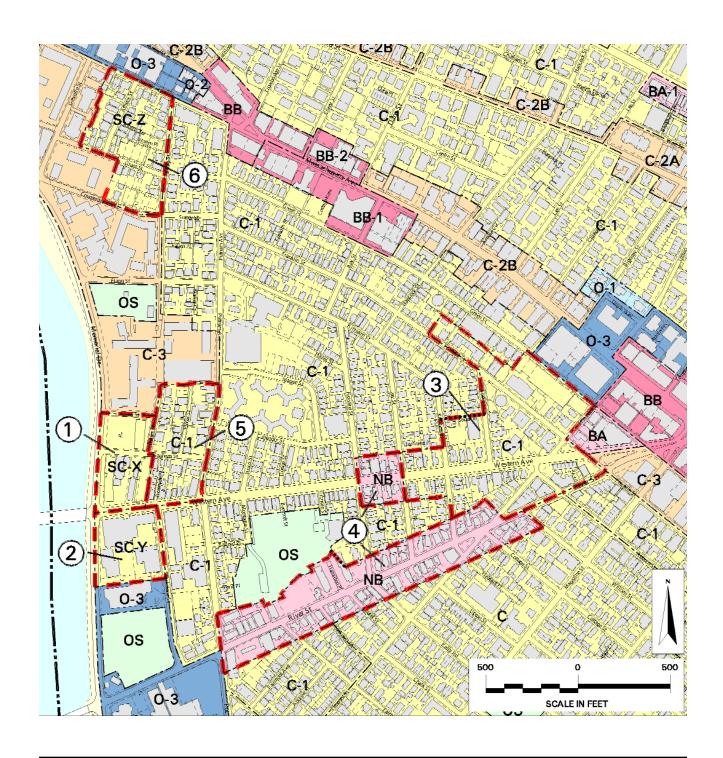
2. RECOMMENDATIONS

The work of the Riverside Study Committee yielded a wide variety of recommendations. A set of recommendations for zoning changes was adopted by majority vote at the Committee's June 12, 2002 meeting. These proposals, which were presented to the Planning Board on June 18, 2002, are explained in Section 2.1 below. A number of the Committee's goals will require tools other than zoning for implementation. These are discussed in Section 2.2. Recommendations related to transportation appear in Section 2.3.

2.1 Zoning Recommendations. The majority of the members of the Riverside Study Committee view zoning as the primary tool for preserving the character of the neighborhood, and zoning issues were integral to the Committee's discussion of planning issues throughout its year of meetings. The Committee viewed much of the existing zoning in Riverside as appropriate; it focused, therefore on those areas where existing zoning did not coincide with the majority of the members' and community goals. Six areas were selected for study:

- 1. Mahoney Blocks
- 2. NStar Site
- 3. Western Avenue, Kinnard, Green and Franklin Streets
- 4. River Street and a portion of Western Avenue
- 5. Putnam and Western Avenues, Banks,

Elmer and Hingham Streets
6. Banks, Grant, Athens, Mt. Auburn and
Cowperthwaite Streets
(See Figure 2.1: Proposed Areas of Change.)
A discussion of each of these areas and the
recommended zoning is presented below.



2.1.1. AREA 1 - MAHONEY BLOCKS

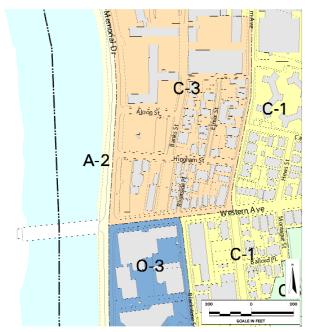


Figure 2.2 Existing Zoning District

Residence C -3

Uses: Residential, Institutional

FAR: 3.0 Height: 120'

Existing Development. The site is entirely owned by Harvard University. It is currently occupied by a retail nursery and garden center and has been so used for decades. The current use is nonconforming in the district. Improvements include a few small buildings on the southern parcel, the tallest probably no higher than 17'. The FAR is probably no greater than 0.10 on that block. Some parking unrelated to the nursery use is located on the eastern edge of the southern parcel.

Existing Context. The surrounding blocks are quite varied in character. To the north is Peabody Terrace, a housing complex for Harvard graduate students. Its scale and form is typical of the kind of development the Residence C -3 district was meant to permit before a 120' height limit was imposed in

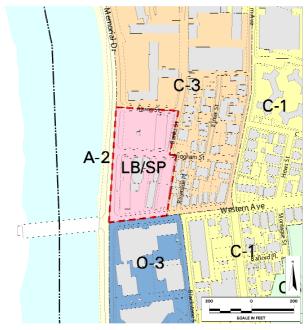


Figure 2.2a

Proposed Zoning District

Special Residence C -X (New district) Uses: Residential, Limited Institutional FAR: 0.6, 1.0 by Special Permit Height: 20-24', 35' by Special Permit

1997. The tallest structures are 180' or more in height. The existing FAR is approximately 1.5. To the west the Mahoney Blocks are open to Memorial Drive, the riverfront greenway and the river itself.

To the south is a dense complex of industrial buildings (NStar). The scale of this complex is generally fairly modest with the exception of the power plant, which is about 75 feet in height; other buildings are in the 35-45' range. Existing FAR is approximately 1.20.

To the east is a neighborhood of woodframe, one, two and three-story residential buildings, fairly typical of the Riverside Residential Core. With one exception, their height does not exceed 35 feet. The average FAR for one-to-three unit buildings is 0.93.

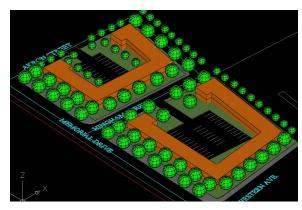


Figure 2.3 Potential development: As-of-Right

Committee's Objectives. The majority of the Committee members' objectives for the recommended zoning for this area can be summarized as follows:

- · Preclude development that would adversely impact the neighborhood
- · Provide an appropriate transition between the residential neighborhood and the river
- · Provide views of the river
- · Prevent dense development facing the river
- · Provide an incentive to encourage open space on site
- Prevent institutional encroachment and expansion
- · Expand neighborhood connection to river
- · Limit use to residential to provide for affordable housing
- · Exclude high traffic generators

Existing Zoning District. The blocks are currently zoned Residence C -3. It is a high-density multifamily district that allows housing and institutional uses. Commercial uses are not permitted. An FAR of 3.0 and a height of 120 feet (potentially modified by state Chapter 91 tidelands restrictions) are allowed. Yards by formula are required. The Residence C -3 District has been traditionally the university campus district and is the district that regulates development at the core of the Harvard and MIT campuses.

Chapter 40A (state law governing local zoning authority) does not allow Cambridge to prohibit university or other institutional uses in a Residence C -3 district. However,



Figure 2.3a Development analogue: As-of-Right

Cambridge has created eight Institutional Overlay Districts to regulate institutions within the limits imposed by Chapter 40A. The Mahoney Blocks are not within any of those Overlay Districts. The fact that the Mahoney Blocks are not within the Institutional Overlay District indicates that at the time of the establishment of the District (1981), the Mahoney Blocks were not, as they are not now, in active institutional use. At the same time, the fact that the Blocks are designated Residence C -3 allows institutional or university uses on them, subject only to the dimensional limits imposed by the district.

Proposed Zoning District. The Committee recommends a variation of the current Residence C district, with an FAR of 0.6, a height of 20-24', and 20' setbacks for all yards. Single, two-family, multifamily and townhouse development would be permitted. Thirty percent of the site would be required to be at-grade Green Area Open Space. (See Figures 2.3: Potential development: As-of-Right; 2.3a: Development analogue: As-of-Right; 2.4: Potential development: Special Permit; and 2.4a: Development analogue: Special Permit.)

The proposed zoning is intended to accomplish the following:

- · Residential development at a low density (both as to height and FAR)
- · Increased amount of open space to

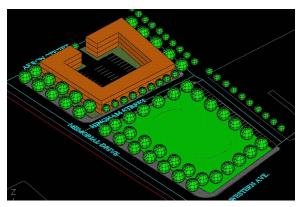


Figure 2.4 Potential development: Special Permit

maintain the current sense of openness between the existing neighborhood and the river (through low FAR and building height, but also through a high open space requirement and extra wide yards).

Prohibition of dormitories (and other intensive institutional uses). Such a prohibition is only possible if the district is residential with a dwelling density of one unit per 1,200 square feet or more of lot area (the criteria established by the General Court by which Cambridge can regulate institutional uses in residential neighbor-

hoods).

The Committee included certain special permit provisions in the proposed zoning to entice a private property owner to partially fulfill that objective. By Special Permit the new district would allow an FAR of 1.0, a height of 35', reduction of yard requirements to zero in most cases, and would allow transfer of development potential from the Western Avenue block to the block abutting Peabody Terrace. Such additional benefits would be allowed only if the south block were devoted almost exclusively to open space accessible to the general public.

Alternatives Considered. The Committee's preferred use for both blocks is as a public space. Recognizing that goal cannot be achieved through zoning, the Committee examined, and in the end rejected, a number of alternate zoning schemes. Harvard



Figure 2.4a Development analogue: Special Permit

University presented the details of a proposed museum use: one building on each block, connected underground across Hingham Street. The proposed project had an FAR of less than 2.0, a height of fifty-five feet, at-grade landscaped setbacks of forty feet around all sides of the buildings, constituting about 50% of the area of the Blocks. The parking was underground and the design called for 82 spaces. The majority of the Committee considered the proposal too dense, although some members did not object to the use itself. The Consultant also presented some alternative massing proposals that were of interest to the Committee. No additional museum proposals were presented by Harvard University. The museum proposal was withdrawn.

Alternate massing sketches were also presented by the University illustrating possible housing development of the Blocks at FAR densities ranging down from 3.0 to approximately 1.75. The majority of Committee members expressed dissatisfaction with such schemes based on the height and scale of the illustrated development.

The Committee also considered variations on the recommended special district that would have allowed retail use in addition to housing. However, any non-residential district would automatically have to allow university uses and dormitories by state law. The dormitory possibility was not acceptable to most

Committee members. On the other hand retail uses of a certain kind (i.e. small in scale and serving the neighborhood or users of the riverfront) were generally thought to be appropriate. Nevertheless, in the end, the decision was not to open the door to dormitory use or large-scale retail operations (e.g. Osco Drug) or other inappropriate retail activity no matter what its scale.

2.1.2 AREA 2 - NSTAR SITE

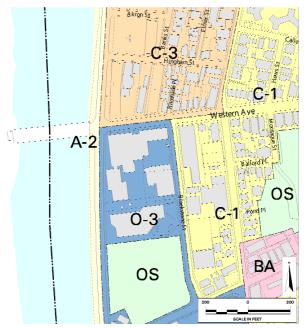


Figure 2.5 **Existing Zoning District**

Residence O -3 Uses: Office, Residential

FAR: 3.0 Height: 120'

Existing Development. The site includes a functioning steam generating power plant and ancillary buildings that have served the utility function in the past. Some of the ancillary buildings are underutilized and most of them are no longer needed to service the power plant. The current power generation use is non-conforming. Most buildings are likely non-conforming as to setbacks, which are determined by formula, because they are at, or close to, the property line. The FAR of existing buildings is around 1.20.

Existing Context. The site abuts the Mahoney Blocks to the north. To the east, other ancillary NStar industrial buildings are located across Blackstone Street. That entire block was recently rezoned from Office 3 to Residence C -1. To the south is the

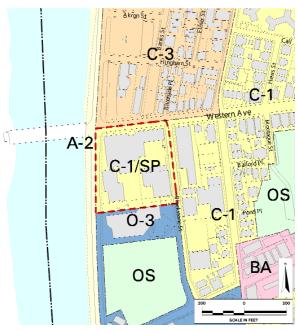


Figure 2.5a

Proposed Zoning District

Special Residence C -Y (New district) Uses: Residential, limited institutional

FAR: 0.6 Height: 20-24'

Technology Center office building, with a height of about 70 feet. To the west, the site is open to Memorial Drive, the riverfront greenway and the river. Some of the buildings on the site have architectural merit and/or historical interest.

Committee's Objectives. The majority of the Committee members' objectives for the recommended zoning can be summarized as follows:

- · Preclude development that would adversely impact the neighborhood
- · Provide an appropriate transition between the residential neighborhood and the river
- · Provide views of the river
- · Prevent dense development facing the river
- · Prevent the development of dormitories
- · Provide opportunity for affordable housing

· Exclude high traffic generators

Existing Zoning District. The site is currently zoned Office-3. This is a high density office and multifamily district that allows general office and research and development uses in addition to housing and institutional activities. Retail uses are not permitted (nor is the Power Plant, which is not an allowed use anywhere in the city). An FAR of 3.0 for housing and 2.0 for office uses applies, with a height of 120' (potentially modified by state tidelands restrictions) for residential uses and 90' for all others. Yards by formula are required. The site was zoned high density business in 1943, rezoned to high density office in 1961. The Office-3 designation was created in the mid 1970s when the Zoning Ordinance established a series of three office districts from what had previously been a single district. The site is not located within any Institutional Overlay District.

Proposed Zoning District. The new district (Special Residence C -Y District) is intended to accomplish the following:

- · Residential development at a low density (both as to height and FAR) should existing structures be demolished, or at a higher density through the conversion of those existing non-residential buildings to housing.
- Prohibition of dormitories (and other intensive institutional uses). This prohibition can only be accomplished if the district is zoned as low density residential.

The district has the same dimensional and use characteristics as the proposed zoning for the Mahoney Blocks without any of the Special Permit options: an FAR of 0.6, a height of 20-24', and 20' setbacks for all yards. Single, two-family, multifamily and townhouse development is permitted. Thirty percent of the site would be required to be at grade Green Area Open Space. (See Figure 2.6: All-housing option.)

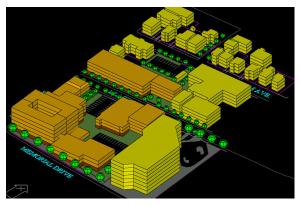


Figure 2.6 All-housing option

Alternatives Considered. A number of alternate zoning schemes were examined by the Committee.

Alternate approaches were considered that would have allowed higher density and greater height on portions of the site (FAR of 2.0, height of 85 feet). Those options were intended to encourage partial redevelopment of the site to secure open space on it, and public access through it, from Blackstone Street to the river. As with the Mahoney Blocks, there was also an interest in allowing limited retail activity to serve both the neighborhood and people out for a stroll along the river promenades. Transfer of Developments Rights (TDR) was suggested for this site as a way to create more open space, but met with strong opposition from the neighborhood.

Again, as on the Mahoney Blocks, potential dormitory use was of concern. Because any non-residential district must allow university functions and dormitories, a non-residential district was unacceptable to most Committee members. The Committee was also not strongly in favor of more development on the site, but was generally in favor of residential reuse of the existing buildings.

2.1.3 AREA 3 - WESTERN AVENUE; KINNARD, GREEN, AND FRANKLIN STREETS

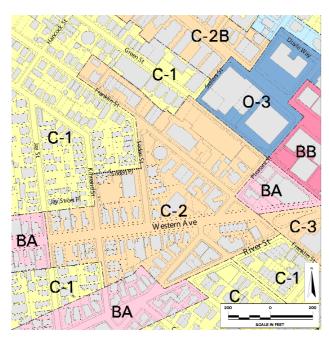


Figure 2.7 **Existing Zoning District**

Residence C -2 Uses: Residential, Institutional FAR:1.75 Height: 85'

Existing Development. The area is substantially residential in character. Sites previously used for industry along Franklin Street have mostly been converted to housing. Some ground floor retail activity, probably established when that corridor was commercially zoned, remains along River Street. A large parking lot fronting on Green Street, owned by the YMCA, is the largest undeveloped site within the area.

In scale, the residential pattern is split between low scaled wood frame construction (about 35' high) at moderate to high density and masonry-construction housing, including late 19th and early 20th century apartment buildings of four or five stories. The area also includes higher-rise apartment construction dating from the last forty years. These

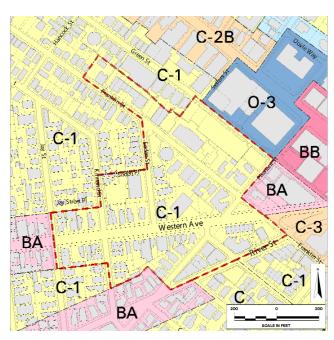


Figure 2.7a **Proposed Zoning District**

Residence C -1 Uses: Residential FAR: 0.75 Height: 35'

buildings are usually about 85' in height. The average FAR of one-to-three family buildings within the area is 0.83.

Existing Context. The area is bordered by the Central Square commercial district to the east and neighborhood-scaled residential development elsewhere.

Committee Objectives. The majority of the Committee members' objectives for the recommended zoning can be summarized as follows:

· Preserve the scale and pattern of the one, two, and three family residential neighborhood (excluding the small setbacks, backyard houses and limited off-street parking of older development) by preventing largescale development

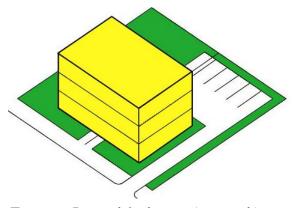


Figure 2.8 Potential development (two parcels)

· Minimize parking and traffic problems

Existing Zoning District. The area is currently zoned Residence C -2. This is a medium-density multifamily residential district that allows all forms of housing and institutional uses. An FAR of 1.75 is permitted with a height of 85 feet. Yards by formula are required. The area has been so zoned in its current configuration since 1961. Prior to 1961 portions were zoned C -2 as far back as 1943. Other portions along the River Street corridor were zoned Business A from 1943 to 1961. Existing retail or other commercial activity in the area is now non-conforming. The area is not located within any Institutional Overlay District.

Proposed Zoning District. The Committee has recommended designation of the area as a Residence C -1 district, the prevailing zone in the abutting neighborhoods to the east and west. An FAR of 0.75 is permitted with a height of 35'. Yards, by formula, are required. The density allowed is one unit per 1,500 sf of lot area. All residential uses are permitted, but institutional uses are severely restricted.

The Committee has made its recommendation in order to preserve the significant inventory of low scale frame housing now common in the district, and to prohibit further erosion of that character through redevelopment to larger scaled buildings. The



Figure 2.8a Development analogue

large scaled, high-rise masonry apartment buildings in the area are not the form of future development desired by the Committee. (See Figures 2.8: Potential development (two parcels); and 2.8a: Development analogue.)

Alternatives Considered. Several alternatives to the Residence C -1 designation were considered. All involved the Residence C -2B district. That district differs from Residence C -2 in that the permitted height is 45' rather than 85' and special green area requirements apply to some required yards. Those alternatives were:

- · Rezoning the entire area Residence C -2B
- Rezoning the portion of the area between Franklin and Green streets to Residence C-2B
- · Rezoning the half block abutting Green Street to Residence C -2B.

There was some sentiment on the Committee favorable to the notion that portions of the area close to Central Square and close to subway service could support higher density housing for urban design, housing and transportation policy reasons. The larger-scaled and taller buildings present tend to be concentrated in the blocks nearer to Central Square. In the end the Committee preferred to maintain for the future the generally prevailing neighborhood building norm reflected by the limitations established in the Residence C -1 district.

2.1.4 AREA 4 - RIVER STREET AND A PORTION OF WESTERN AVENUE

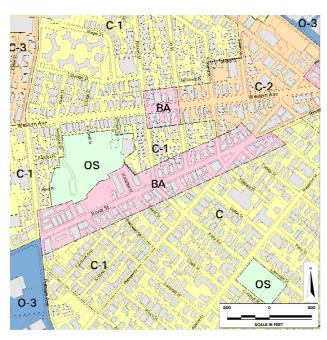


Figure 2.9 **Existing Zoning District**

Business A

Uses: Commercial/Residential

FAR: 1.0/1.75 Height: 35'/45

Existing Development. This area consists of one block on Western Avenue between Jav and Howard Streets and several blocks along River Street from Williams Street in the east to Putnam Avenue on the west. While a wide range of commercial uses are permitted, both areas are predominately residential in character. The retail activities that are present tend to be located in small commercial extensions onto older wood frame residential buildings. Few sites are in exclusive commercial use. The actual pattern of development differs little from the residential lots abutting in the neighborhood. Most structures are residential, wood framed, about 35' tall, and freestanding on their own lot. The existing average FAR is about 0.97.

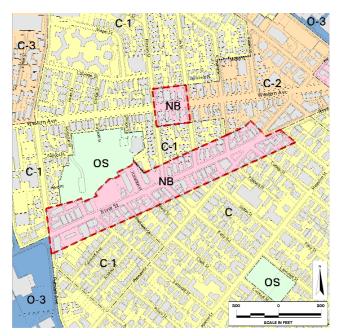


Figure 2.9a

Proposed Zoning District

Neighborhood Business (New district)

Uses: Residential, Retail

FAR: 0.75 Height: 35'

Existing Context. The section on Western Avenue is bordered on all sides by residential neighborhoods. The section on River Street is bordered by residential neighborhoods in Riverside and Cambridgeport and by Hoyt Field in Riverside.

Committee Objectives. The majority of the Committee members' objectives for the recommended zoning can be summarized as follows:

- · Bring zoning into conformance with existing uses and dimensions (but not the small setbacks, backyard houses and limited offstreet parking of older development)
- · Allow residential use
- · Allow retail use that is small in scale which will not increase traffic and parking problems

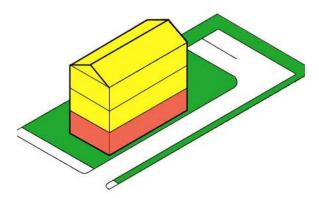


Figure 2.10 Potential development

· Encourage small business development

Existing Zoning District. The two areas are currently zoned Business A. This is the highest density neighborhood business district; it allows a range of retail and office uses in addition to all forms of housing. An FAR of 1.0 for retail and office uses and 1.75 for housing are permitted. Commercial uses are limited to a height of 35'; housing is permitted at 45 feet. Yards, by formula, are required for housing but only a 20' rear yard is required for commercial uses. The two areas have been similarly zoned since 1943. The area is not located within any Institutional Overlay District.

Proposed Zoning District. The Committee has recommended the creation of a new residential/retail district that would be the retail analog to the Residence C -1 residential district and the Office-1 district: i.e. an FAR of 0.75, a height of 35', yards by formula, and a dwelling unit density of one unit per 1,500 sf of lot. Retail activity would be permitted in a building containing residential uses, but only on the first floor and in the basement. It could constitute no more than 40% of the gross floor area (GFA) of the structure. (See Figures 2.10: Potential development and 2.10a: Development analogue.)

The Committee has made its recommendation in order to preserve the significant inventory of housing and freestanding build-



Figure 2.10a Development analogue

ings that characterize the areas, while offering the opportunity to expand small neighborhood-serving commercial activity along the streets. The proposed regulations are intended to allow retail activity at a neighborhood scale without encouraging the transformation of the street from a residential extension of abutting blocks to a full fledged retail district of streetwall buildings and large stores.

Alternatives Considered. Two alternates were considered: retention of the existing district or rezoning to Residence C -1. The Committee viewed the new district as a reasonable compromise to preserve existing housing while allowing limited retail activity in the form that currently exists along River Street and Western Avenue.

(See also Zoning Options in Appendix F.)

2.1.5 AREA 5 - PUTMAN AND WESTERN AVENUES; BANKS, ELMER AND HINGHAM STREETS

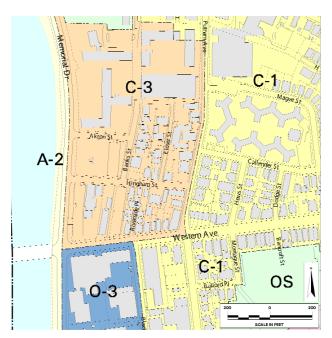


Figure 2.11 **Existing Zoning District**

Residence C -3

Uses: Residential, Institutional

FAR: 3.0 Height: 120'

Existing Development. The area is nearly entirely residential in use. The prevailing development type is a freestanding wood frame structure, two to three stories high. There is one large multifamily structure on a previously commercial site redeveloped to housing in the 1980s. While individual structures tend to be modest in size, the built density of one-to-three-family buildings is relatively high (FAR of 0.93).

Existing Context. The area is bordered by the Mahoney Blocks to the west, the parking garage and low-rise elements of Peabody Terrace to the north, Putnam Gardens public housing and residential neighborhood blocks to the east, and the NStar facilities and some housing across Western Avenue to the south.

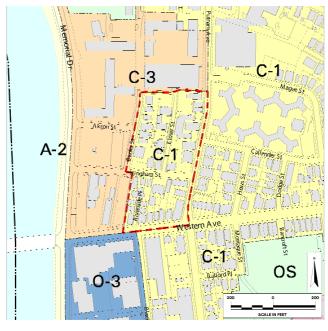


Figure 2.11a **Proposed Zoning District**Residence C -1

Uses: Residential FAR: 0.75 Height: 35'

Committee Objectives. The majority of the Committee members' objectives for the recommended zoning can be summarized as follows:

- · Prevent further institutional expansion in the neighborhood
- · Preserve the scale and pattern of the one, two, and three family residential neighborhood (excluding the small setbacks, backyard houses and limited off-street parking of older development) by preventing large-scale development
- · Minimize parking and traffic problems

Existing Zoning District. The area is currently zoned Residence C -3. It is a high-density multifamily district that allows housing and institutional uses. Commercial uses are not permitted. An FAR of 3.0 and a height of

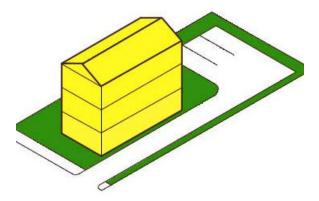


Figure 2.12 Potential development

120 feet is permitted. Yards by formula are required. The zone has traditionally been the university campus district and is the district regulating development at the core of the Harvard and MIT campuses. The site has been zoned C -3 since 1961. From 1943 to 1961 the entire area had been zoned Residence C -1, except that the frontage on Western Avenue was designated Business A. The area is not located within any Institutional Overlay District.

Proposed District. The Committee has recommended designation of the area as a Residence C -1 district, the prevailing zone in the abutting neighborhood blocks to the east. An FAR of 0.75 would be permitted with a height of 35'. Yards, by formula, would be required. The density allowed is one unit per 1,500 sf of lot area. All residential uses are permitted, but institutional uses would be severely restricted. The Committee has made its recommendation in order to preserve the scale of the present neighborhood. (See Figures 2.12: Potential development and 2.12a: Development analogue.)

Alternatives Considered. The Committee did not consider alternate approaches.



Figure 2.12a Development analogue

2.1.6 AREA 6 - BANKS, GRANT, ATHENS, MT. AUBURN AND COWPERTHWAITE STREETS

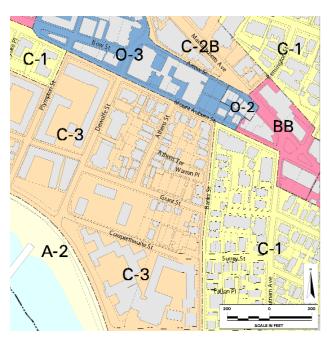


Figure 2.13

Existing Zoning District

Residence C -3

Uses: Residential, Institutional

FAR: 3.0 Height: 120'

Existing Development. Buildings in the area are all in residential use. The area also includes two large parking lots owned by Harvard University. The prevailing development consists of freestanding wood-frame structures, two-to-three-stories high. Lot sizes and lot widths are commonly substandard (ca 4,000 sf, sometimes less, with a width of 40'). The overall density is about 0.75 FAR, when the few larger apartment buildings are excluded. This area of Riverside was identified during the Citywide Growth Management process as a key transition edge to be addressed.

Existing Context. The area is bordered to the west and south by Harvard University dormitories. They are generally large complexes, moderately to quite dense, and ranging from 40' to 110' feet in height as they directly abut

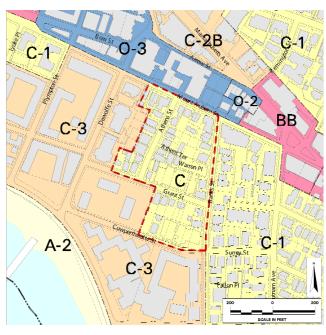


Figure 2.13a

Proposed Zoning District

Special Residence C. Z. (New

Special Residence C -Z (New district)

Uses: Residential FAR: 0.60 Height: 35'

the area. To the east across Banks Street are standard Riverside residential blocks. To the north across Mt. Auburn Street is the Harvard Square business district where the St. Paul's Church complex and the Reversible Collar Factory building are the immediate neighbors.

Committee Objectives. The majority of the Committee members' objectives for the recommended zoning can be summarized as follows:

- · Replicate the existing pattern of one, two and three family housing on small lots except for the small setback, backyard houses and limited off-street parking of older development
- · Discourage dormitory development

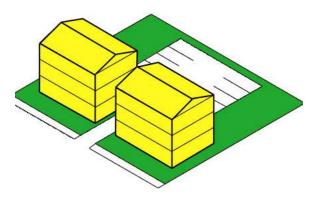


Figure 2.14 Potential development

Existing Zoning District. The area is currently zoned Residence C -3. It is a high density multifamily district that allows housing and institutional uses. Commercial uses are not allowed. An FAR of 3.0 and a height of 120' are permitted. Yards by formula are required. The C -3 zone has traditionally served as the university campus district in the Zoning Ordinance and is the district regulating development at the core of the Harvard and MIT campuses. The site has been so zoned since 1943.

The portion of the area between Grant and Cowperthwaite Streets is located within the Harvard, Radcliffe, Lesley Institutional Overlay District.

Proposed Zoning District. The Committee has recommended designation of the area as a new district that would be a variation on the Residence C district (a Special C district). It would have the usual Residence C dimensional provisions: an FAR of 0.60 with a height of 35'; yards by formula; one dwelling unit per 1,800 sf of lot area; and a 36% open space requirement. All residential uses would be permitted, but institutional uses would be severely restricted.

The special features of the district are intended to provide incentives (and some explicit restrictions) to encourage a traditional pattern of development on the large vacant parking lots that front on



Figure 2.14a Development analogue

Cowperthwaite and Grant Streets, among others. The objective is to see residential structures with two or three units each constructed in regular rows along existing streets, infilling vacant spaces in a traditional manner.

To prevent large townhouse or multifamily structures, each lot in the district would be allowed only to have one principal structure on it, containing no more than two units, and containing no more than 3,000 square feet of gross floor area. Variations on this kind of limitation are now in force in Residence A and B districts. These limitations would require subdivision of large lots if the full, or nearly full, development potential of those lots were to be achieved.

To encourage those subdivided lots to be located on streets (fairly easy to achieve in this context), dimensional requirements for lot size, setbacks, lot frontage, FAR and dwelling units would be relaxed if a lot fronts on a street within a specific width range and the building is in close proximity to the street. The relaxed standards would apply to the smaller subdivided lots, but the general density limits of the original large lot could never be exceeded.

The recommendation would eliminate from the Institutional Overlay District the portion of the Cowperthwaite/Grant Streets block that is now developed only for parking lot and residential uses.

(See Figures 2.14: Proposed development; 2.14a Development analogue and 2:15: Double house in Riverside.)

Alternatives Considered. Harvard University, owner of many of the frame houses in the area and of the large parking lots, developed a schematic zoning proposal with some of the immediately affected neighbors in the Banks Street area. It suggested new housing construction well below the density allowed in the C -3 district, with building heights varying from 35' to 65'. The new housing would not be for undergraduates. The proposal was presented to the Committee, most of whose members considered it too dense and too permissive as to height.

Both the standard Residence C district and the standard Residence C -1 district were considered as options. Most members of the committee desired strong incentives to replicate current building patterns on these city blocks and to secure some additional open space; the special C district was therefore the preference. (See also Zoning Options in Appendix F.)

2.2 Non-Zoning Recommendations.

While zoning changes were the primary focus of the Committee's discussions, other potential planning tools and public actions were also addressed. Four areas of Committee concern and the resulting recommendations are presented below.

2.2.1 Townhouse Ordinance. The majority of Committee members were of the opinion that the Townhouse Ordinance results in projects that do not conform to the development pattern they envision for Riverside. It no longer serves the purpose of encouraging moderate income housing, and in the Committee's view unfairly rewards the developers over homeowners. They suggested modifications to the Townhouse Ordinance that would bring townhouse projects in closer conformance with the base C and C -1 zoning districts requirements. Following are



Figure 2.15 Double house in Riverside

the major differences between the Townhouse Ordinance and the base C and C -1 zoning districts:

- · FAR C = .6; C -1 = .75 Townhouse = .825 in C-1 district for lots of 15,000 sf or more
- · Height C and C -1 = 35' Townhouse = 40'
- · Minimum lot width C and C -1 = 50' Townhouse = No minimum
- Frontyard
 C and C -1 = Formulas (minimum =10')
 Townhouse = Match neighboring projects or 10', whichever is less
- Parking
 C and C -1 = One space per unit
 Townhouse = Allows possibility of onstreet parking

The Study Committee recommends that Townhouse developments be required to conform to the lot width and FAR requirements for the underlying zoning district.

The change in height from 40' to 35' could possibly make the difference of a full floor (though under the Townhouse Ordinance

this floor would be within a Mansard roof).

Requiring a 10' minimum front yard, rather than matching neighboring projects could mean a greater setback, depending on the location. Residential structures in Riverside are often located close to the street, so in most cases it would probably result in a greater setback.

2.2.2 Existing Dormitory Complexes.

Throughout the Committee's discussions, many detailed suggestions were made for changes to existing Harvard dormitory complexes in the Riverside neighborhood. Most of these suggestions were directed toward mitigation of the inward facing buildings and impenetrable peripheries of these complexes.

The typical Riverside block is approximately 200' by 500'. Some dormitory complexes maintain blocks of similar size, but others create what are essentially super blocks. The majority of the members of the Committee recommend introduction of publicly accessible passageways through the large blocks, wherever possible. This change could serve to functionally and visually integrate the dormitory complexes into the neighborhood.

The dormitory complexes all include interior courtyards. Resident Committee members would like these open spaces to be more publicly accessible (fences and/or black mesh removed). (See Figures 2.16: Peabody Terrace Courtyard and 2.17: Fence at Peabody Terrace.)

In some locations the dormitory complexes present unfriendly facades to the neighborhood, such as the façade of the Peabody parking garage on Elmer Street. (See Figure 2.18: Peabody Terrace Garage.) Resident members of the committee would welcome modifications to architectural and landscape treatment that would make the complexes more neighborhood-friendly. In some cases, perhaps, new ground level uses that would appropriately be oriented to the sidewalk could be introduced.



Figure 2.16 Peabody Terrace Courtyard



Figure 2.17 Fence at Peabody Terrace



Figure 2.18 Peabody Terrace Garage

The Study Committee recommends that the City work with Harvard University to improve physical and visual public access to its dormitory complexes in Riverside.

2.2.3 Pedestrian Network. A combination of public and private improvements could result

in a more attractive and functional system of pedestrian ways in Riverside.

Traffic calming measures and improved pedestrian crossings are needed on Western Avenue, River Street and Memorial Drive. These are discussed in Section 2.3.

Streetscape improvements could enhance the pedestrian environment throughout Riverside. Western Avenue is a particularly strong candidate for improvements. Its generous width would allow for wider sidewalks than those currently existing, without reducing the number of traffic lanes. Wider sidewalks, with trees, pedestrian-scale lighting and other pedestrian amenities, would not only be more attractive, but would also provide a buffer between residential uses and the relatively heavy traffic on Western.

Section 2.2.2 addressed the need for more pedestrian connections through existing dormitory complexes. The University is currently exploring options for future housing development on the Mahoney's Blocks. If the Neighborhood Spine discussed in Chapter 1 is to be implemented, a public pedestrian way from Hingham Street to Western Avenue will need to be included in the site plan. Future development along Blackstone Street in the NStar site will also need to recognize and provide for the spine.

The Study Committee recommends that the City develop a strategy for enhancing the pedestrian environment in Riverside, both through public improvements and through cooperative agreements with Harvard University and other key property owners.

2.2.4 Charles River Parkland and Bridges. The MDC has jurisdiction over the parkland along the Charles River. It also owns and maintains Memorial Drive and the bridges across the river.

Cambridge parks are well maintained and Cambridge residents have high expectations for maintenance of the riverfront parkland. Maintenance of the riverfront park does not meet these expectations. The Charles River bridges located by Riverside are in obvious need of repair.

The Study Committee recommends that the City work with the MDC to improve maintenance of the Charles River parkland and bridges.

2.2.5 Long Term Studies

The Study Committee recommends that the City establish a group to explore Town/Gown relationships around the country, make an assessment of practices that could result in the least negative impacts on the community, establish an early information process, and study the impact of the Allston development on Riverside.

2.3 Transportation. The Riverside neighborhood's roadway network is quite diverse, ranging from arterial roadways to one-way residential streets. The network itself is predominantly a rectangular grid pattern, though some variations occur around River Street and Western Avenue, which are radial streets. Figure 2.19 shows the geometry of the existing roadway network in Riverside.

Transit service for Riverside is concentrated at the edges of the neighborhood, with Red Line stations and major bus hubs at both Central Square and Harvard Square. MBTA bus service is confined to Massachusetts Avenue, Western Avenue and River Street. Some shuttles have routes that run through the neighborhood. One of these, the MASCO LMA Shuttle, is open to the public.

While the City has implemented many policies and projects aimed at promoting alternatives to single-occupant vehicle travel to reduce congestion and maintain the livability of Cambridge, neighborhood concerns remain about pedestrian safety, increased traffic on residential streets and parking.

2.3.1 Traffic Analysis.

Existing Traffic Volumes and Circulation. The

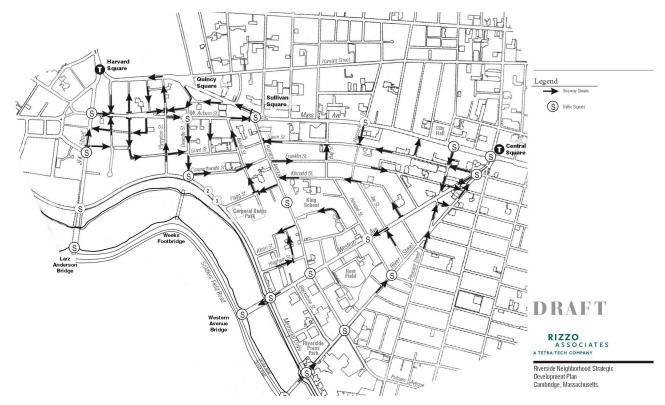


Fig. 2.19 Street System and Traffic Control

majority of streets in Riverside are one-way streets. These streets tend to be narrow, residential streets with on-street parking. The one-way restrictions help to limit the use of these streets for through traffic. Weekday traffic volumes on these streets are typically less than 750 daily vehicles between Putnam Avenue and the Charles River. Between Massachusetts Avenue and Putnam Avenue, daily volumes on these streets typically range from 1,000 to 1,200 vehicles, as they are also used to some extent by vehicles destined for businesses and employment centers in Harvard Square.

A few short streets provide important links between major arterial roadways. These links carry more traffic than those serving primarily the residential uses adjacent to the streets, with weekday traffic volumes ranging from approximately 1,500 to 4,500 vehicles. These streets include Bow Street/Arrow Street/DeWolfe Street (from Massachusetts Avenue to Memorial Drive), Plympton Street

(from Memorial Drive to Mt. Auburn Street), and Hingham Street (from Memorial Drive to Putnam Avenue).

Longer streets that create direct routes attract a higher proportion of through traffic than those which end or reverse direction after only a few blocks. There are eight roadways in Riverside which operate in this manner. Three of these streets operate as both local and regional connectors, with weekday traffic volumes between 5,000 and 8,000 vehicles per day. These streets are Putnam Avenue. Green Street and Franklin Street. Five others are major facilities which connect Cambridge to surrounding communities and attract primarily regional traffic. For these streets, weekday traffic volumes are approximately 25,000 to 30,000 vehicles per day (with roadways restricted to one-way traffic carrying approximately one-half of this daily volume). Memorial Drive, River Street, Massachusetts Avenue/Mt. Auburn Street, and JFK Street, all fall into this category. Western Avenue is

also a major facility with approximately 21,500 daily vehicles. Daily volumes by street are depicted in Figure 2.20.

Existing Traffic Operations. The efficiency and safety of vehicular operations is controlled by the capacity of key signalized intersections at the entry/exit points of the Riverside neighborhood. These intersections effectively "meter" the volume of traffic within the neighborhood. The nine signalized intersections are:

- · Memorial Drive and JFK Street
- · Memorial Drive and DeWolfe Street
- · Memorial Drive and Western Avenue
- · Memorial Drive and River Street
- · Putnam Avenue and River Street
- · Putnam Avenue and Western Avenue
- · Sullivan Square (Putnam Avenue and Mount Auburn Street)
- · Massachusetts Avenue and Inman/Pleasant Streets
- · Central Square

The three signalized intersections in Allston on the Soldier's Field Road ramps at North Harvard Street, River Street and Western Avenue were also analyzed.

Figure 2.21 depicts the current level of service for the weekday morning and afternoon peak hour and for the Saturday peak hour which occurs midday at signalized intersections. Level of service F conditions, indicating high levels of congestion, presently occur on JFK Street and on River Street at intersections on both sides of the Charles River during one or both of the weekday peak hours. The only level of service F condition during the Saturday midday peak is at the intersection of JFK Street and Memorial Drive.

Critical Movements analysis was used to evaluate operations at twelve intersections in or near the Riverside neighborhood. Critical Movements analysis is an appropriate tool for comparative analysis of traffic operations over long periods of time, providing a snapshot of the relative differences in intersection

performance. This methodology has been used in both the Citywide Rezoning process and the Eastern Cambridge Planning Study. This methodology yielded similar results to the level of service analysis, showing current performance deficiencies at the intersections of Memorial Drive/Western Avenue, Memorial Drive/JFK Street and Soldier's Field Road/River Street.

It is also worth noting that Committee members reported that neighborhood residents experience significant seasonal variations in traffic. In particular residents perceive Sunday traffic, when Memorial Drive is closed for Riverbend Park as much heavier than during months when Memorial Drive is not closed. Residents also remarked that traffic is less of a burden and it is significantly easier to park during summer months and during school vacation periods.

Trucks. The Regional Truck Study recommendations were completed in September 2001. The effect of the recommendations on Riverside is that through trucks would be banned from 11pm to 6am except on Massachusetts Avenue (Route 2A). No changes would be made to the current restrictions on River Street and Western Avenue, which currently ban trucks from 7pm to 7am Monday to Friday and 24 hours on weekends. Trucks carrying hazardous materials, however, are permitted to use River Street and Western Avenue at all times.

To date, the City has been unable to get the necessary Massachusetts Highway Department approvals to implement the Study recommendations. The City Council passed a zoning ordinance as an alternative mechanism to implement the truck restrictions. Hearings on the proposed ordinance by the Council and the Planning Board were held during November 2002. The ordinance was adopted and takes effect in February 2003.

Pedestrian Environment. In many areas,

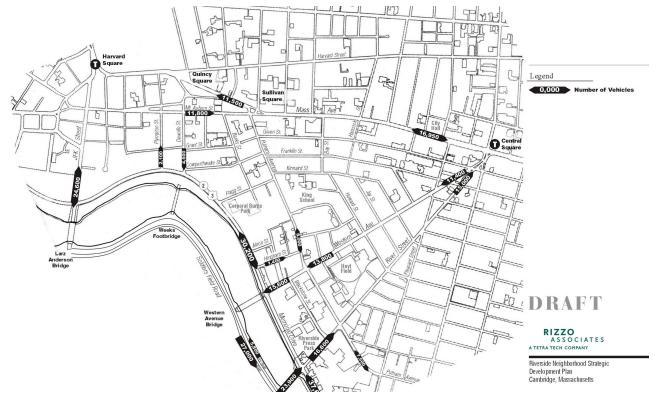
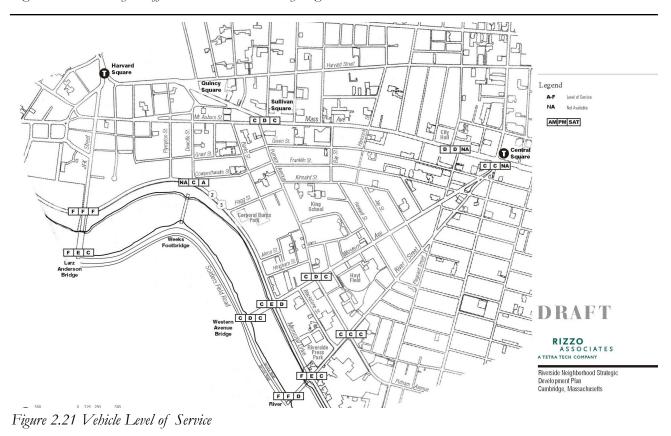


Figure 2.20 Weekday Traffic Volumes and Roadway Segments



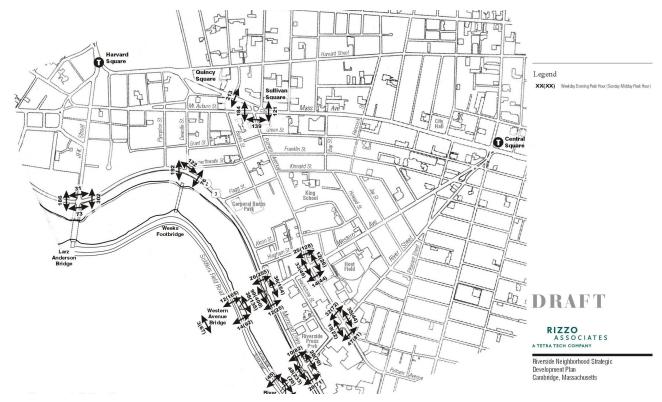


Figure 2.22 Pedestrian Volumes

Riverside provides a positive environment for pedestrians. Its narrow, residential streets, sidewalks buffered by on-street parking and bounded by an attractive, well-defined street wall make it an eminently walkable neighborhood. However, there are areas where this network of walkable streets breaks down. In some cases, the vehicles that can serve as a buffer from passing traffic also impede sight lines, making safe crossing of the street - by either pedestrians or vehicles - more challenging. Deficiencies typically are associated with crossings, particularly of the major streets that make up the borders of the neighborhood. In some cases, simple improvements, like re-painting crosswalks, are needed. Other crossing situations are more complex. In particular, the acute angle intersections created by the radial River Street and Western Avenue with the local cross streets pose particular challenges in creating safe crossings for pedestrians. Memorial Drive also poses a major barrier for pedestrians attempting to access the riverfront across

from the neighborhood. While walkways are provided on both sides of Memorial Drive, there is a significant stretch of the roadway without any signalized crossing for pedestrians. Peak pedestrian volumes at key Riverside intersections are depicted in Figure 2.22.

Bicycle Environment. The bicycling environment in Riverside is varied, with many opportunities and also some challenges. Because there are so many destinations close together, bicycling can be an ideal way for people to get around, both for transportation and for recreational trips. The Paul Dudley White Bike Path along the Charles River provides opportunities for all types of cyclists to enjoy space separated from motor vehicles. Bike lanes on Massachusetts Avenue clearly indicate to motorists that the presence of cyclists is to be expected and accommodated. Many of the residential streets, while narrow, carry very low volumes of auto traffic, making them comfortable for bicycling.

However, some streets are not as accommodating. Putnam Avenue is sufficiently narrow that an automobile cannot pass a cyclist without protruding into the on-coming traffic lane. In some areas, cyclists may feel squeezed between parked vehicles and traffic. On Western Avenue, roadways are sufficiently wide to accommodate bicycles, but the width also has the effect of encouraging higher speeds among motorists, making some cyclists uncomfortable. Even the Paul Dudley White Path poses some challenges for cyclists, since the path is generally too narrow to accommodate all the users, and crossing Memorial Drive to get to the path is not as comfortable as it ideally could be. In general, a cyclist with either good knowledge of the street layout in the neighborhood or confidence riding in urban traffic can typically find routes to accommodate both transportation and recreational riding needs.

Public Transportation and Shuttle Service. Transit in the Riverside neighborhood includes both public and private services. Public transit services are operated by the Massachusetts Bay Transportation Authority (MBTA) and include the Red Line rapid transit line, with stations at Central Square and at Harvard Square, and bus services. There are six bus routes which serve the Riverside neighborhood, with routes along the boundary streets and within the neighborhood. There are also other bus routes which terminate at or within a few blocks of Central Square (four additional routes) and Harvard Square (ten additional routes).

Buses run on average every 10 to 20 minutes during rush hours, 15 to 30 minutes during the rest of the day, and 30 to 60 minutes after 8:00 P.M.

Private transit shuttle bus routes in the Riverside neighborhood are currently operated by Harvard University and by the Medical Academic and Scientific Community Organization (MASCO). Harvard has three routes for use by members of the University. These routes connect between their Cambridge and Allston facilities and travel on streets in the Riverside neighborhood as follows:

- · Mather House Science Center via Harvard Square: Loops around DeWolfe Street, Cowperthwaite Street, Banks Street, and Mt. Auburn Street to Massachusetts Avenue.
- · Soldier's Field Park Lamont Library via Harvard Square: Travels on DeWolfe Street, Memorial Drive, and across the Western Avenue Bridge into Allston, returning via the Larz Anderson Bridge onto JFK Street.
- · Currier House Science Center Express: Travels on DeWolfe Street, Cowperthwaite Street, Putnam Avenue and across the Western Avenue Bridge into Allston, returning via the Larz Anderson Bridge onto JFK Street.

MASCO manages (for Harvard University) three variations of the M2 shuttle bus between the Longwood Medical and Academic Area (LMA) and Harvard Square. The primary route travels along Massachusetts Avenue and returns via Bow Street and Mt. Auburn Street. Bus stops adjacent to the Riverside neighborhood are located at Central Square, Massachusetts Avenue at Bay Street, Massachusetts Avenue at Sullivan Square, and at Harvard Square. There is a morning express route that stops at Putnam Avenue and Mount Auburn Street, the Bread & Circus on River Street and at the corner of Brookline and Granite streets. The M2 shuttle operates every ten minutes during rush hours, every 15 to 30 minutes during the day, and every hour during the evening until 10:30 P.M. The shuttle is free for members of the Harvard Medical Community and is available for a fee (ranging from \$0.65 to \$0.85 per ride) to other members of the Harvard Community and to the general public. Tickets for this shuttle are available for purchase in Cambridge at Holyoke Center and at 1350 Massachusetts Avenue. No cash fares are accepted. Drivers are allowed to pick up and discharge passen-

gers at designated stops only. It is not well known that this shuttle is open to the public, as advertising and opportunities to purchase tickets have been very limited to date. However, the operator has been required, through the City's Jitney License process, to actively publicize the shuttle's availability to the general public.

The Committee expressed concerns regarding shuttle operations, especially on routes through residential areas. Neighbors along these routes noted that the vehicles tend to be very loud, are very frequent and run late into the night. While there was a recognition that shuttle service can help reduce vehicle trips through the neighborhood, the concerns about wear and tear on neighborhood streets and the irritation with the noise from the shuttles outweighed this benefit for many Committee members.

Parking. Parking in Riverside, as in much of Cambridge, is constrained. Riverside is a densely populated, older urban neighborhood where many households have no driveways or other off-street parking. Thus, residents rely heavily on on-street resident permit parking spaces. There is high demand for these spaces in Riverside, not only from Riverside residents but also from Harvard affiliates commuting to the area and those destined for the Harvard Square commercial district as either patrons or employees. It is also the case that several streets in Riverside are owned by Harvard and are therefore not available as on-street parking to residents without a Harvard affiliation, thereby making the parking in the area relatively more constrained than would be the case otherwise. It should be noted that Harvard has made some effort to ameliorate the situation by allowing some Riverside residents to park as guests in the Grant Street lot overnight from 5 P.M. to 7 A.M. for an annual fee of \$135. Many residents do not avail themselves of this opportunity, as the requirement to move one's car by 7 A.M. is seen as an onerous restriction that significantly reduces the value

of the parking.

It is likely that demand for parking in Riverside has grown over the last decade due to a number of factors, including changes in households and auto-ownership. Harvard affiliates who elect to park their vehicles onstreet rather than pay more for Harvard's offstreet facilities also contribute to parking demand. Non-Riverside Cambridge residents commuting to the area also increase demand for on-street spaces. However, based on existing data, it is not possible to quantify precisely the relative influence of these factors.

During the Riverside Study residents expressed concern that parking for residents in the study area was very constrained and provided a hardship to residents. Parking spaces available for residents to park in were static, while demand for those spaces has increased. They also expressed concern about the adverse impact of Harvard students on the limited parking supply. A group of residents put together a careful and thorough inventory of the on- and off-street resident parking available in the study area. The inventory was well documented and provided counts of residential parking by block face as well as in driveways and off-street areas. This information would not have been available without this substantial undertaking by the residents. To complement the work done by the residents the City provided information on the number of resident permits issued in the study area as well as the 1990 census information on auto ownership. (2000 census data on auto ownership is not yet available.) Information on permits issued to students in the Harvard dorms was also provided.

The parking available to residents in the area, both on-and-off street, totaled 3,000 spaces with that supply split 50-50 between the onstreet and off-street supply. The City issued 2009 resident permits for the area. Of the 3,300 students in the River Houses, 37 had resident permits on their cars. The River

Houses are concentrated in the Kerry Corner section of Riverside. (See Appendix H for more information.)

2.3.2 Future Traffic Operations. Two future scenarios were considered to evaluate the relative performance of traffic operations for the year 2022. The first scenario (the "existing zoning" scenario) envisioned a probable build out scenario under the existing zoning during that time frame. The second scenario reflected a zoning proposal under consideration by the Committee as of April 10, 2002 (the "April 10" scenario). This scenario included development which was considerably more dense and included more retail development than the zoning ultimately recommended by the Committee. The consultant team did not produce a traffic scenario based on the committee's final zoning recommendation ("final zoning" scenario). From these build-out projections of the "existing zoning" and "April10" scenarios, estimates of expected traffic volumes were developed and assigned to the street network and their impact on intersection performance analyzed. While the analysis represents a reasonable projection of future events, the results are best understood as providing a picture of the relative, rather than absolute, impacts associated with the two zoning scenarios.

According to this analysis, there is little difference in intersection performance between the existing zoning in 20 years and the "April 10" zoning scenario in 20 years. The Committee's recommended zoning would result in less traffic than either the existing zoning or the "April 10" zoning scenario. However, many of the intersections analyzed are heavily influenced by traffic whose origins and/or destinations are outside of the neighborhood, and therefore development in the neighborhood is unlikely to be a major factor in intersection performance. The two scenarios analyzed showed a maximum 5% difference in the performance of the most heavily impacted intersection from current operations. The percentage difference

between the existing zoning scenario and final zoning scenario has not been determined. Additionally, it should be noted that background traffic growth over a twenty-year period has not been factored in because it is not impacted by zoning changes proposed for Riverside. Therefore, results reflect only additional traffic generated by Riverside-area development and should not be seen as a forecast for actual intersection performance.

For complete results of the traffic analysis, please see Appendix I.

2.3.3 Neighborhood Transportation Plan.

The Neighborhood Transportation Plan aims to address many of the transportation-related concerns that have been raised through the Riverside Study Committee. The majority of these concerns relate to creating an environment which is safe for, and inviting to, pedestrians and cyclists; however, concerns were also raised regarding minimizing traffic on residential streets and alleviating current parking difficulties. Possible strategies for addressing these objectives are summarized below. Specific measures are outlined according to the timeframe in which they may be expected to be undertaken.

Create a Pedestrian- and Bicycle-Friendly *Environment.* The Riverside Study Committee repeatedly brought up concerns relating to the walking and bicycling environment. The Committee's desire to maintain and enhance Riverside's pedestrian-oriented nature, where one can walk to the corner store, to the park, to school, and to visit a neighbor, was very clear, as were concerns that the volumes and speeds of traffic in the neighborhood has made this a challenge. In order to create a safe and inviting environment for bicycling and walking, operational, service and/or infrastructure improvements have been proposed for several streets in Riverside. These improvements will aim to:

- · Slow vehicular traffic
- · Reduce crossing distances and improve sight lines

- · Increase protection from vehicles at crossings
- · Improve access to area recreational opportunities

Minimize Traffic on Residential Streets. A strong desire was also expressed to minimize traffic on residential streets in the neighborhood, including Putnam Avenue, River Street and Western Avenue. Of particular concern was traffic from trucks and shuttles, especially late at night. While many options were discussed, most had the effect of shifting traffic from one residential street to another, rather than reducing traffic on residential streets overall. Strategies, therefore, have focused on ways of reducing the impacts of traffic. Strategies that could help in this regard include:

- Working with Harvard to minimize impacts from loading at houses abutting the neighborhood
- · Ensuring that shuttle services regulated through the Cambridge License Commission use routes and operating hours that minimally impact residents
- · Exploring opportunities for using quieter, cleaner vehicles for shuttle operations

Reduce Parking Constraints. The Committee voiced a strong desire to see the parking situation in the neighborhood improved. Many expressed frustration with the currently constrained supply and the apparent increase in vehicles in the neighborhood. Though, as noted earlier, the precise influence of particular factors in this situation are difficult to quantify, it is still possible to move forward with some strategies to ameliorate the situation. Options for improvement include:

- Working with Harvard to entice a greater number of Harvard-affiliated Riverside residents to store their vehicles in Harvardowned parking facilities
- · Looking for opportunities to add on-street parking in the neighborhood
- Increasing enforcement, especially regarding visitor passes and verification of residential addresses

2.3.4 Challenges and Opportunities.

Challenges. In discussing the possibilities for improvement to transportation in Riverside, it is important to recognize that there are many challenging aspects of the current system which it may not be possible to change. While exploring possibilities and opportunities for improvement, it is important to keep the following constraints in mind:

- · Multiple roles of River Street, Western Avenue, and Putnam Avenue serving regional and local traffic. This leads to heavy traffic volumes on residential streets.
- Riverbend Park results in increased traffic on Putnam Avenue from late April to early November and no good alternative routes exist.
- · Often no obvious way of preventing shortcut routes without impacting emergency response, trash collection, street sweeping, etc.
- Trade-offs between moving vehicles along Memorial Drive and maintaining good pedestrian access to the Charles River.
- · Unlikely to reverse trends leading to greater auto-ownership in Riverside.
- It is the City's position that it is not permitted to deny residential parking permits to students who establish Cambridge as their residence. Committee members, however, feel that it may be possible to distinguish between students and other residents in issuance of resident parking permits and feel that this is worth pursuing, through whatever channels necessary.

Opportunities. Despite these challenges, many opportunities for improvement exist. The City has already undertaken some improvements at the request of residents and many others are underway or being evaluated for feasibility. These opportunities reflect a range of proposals to reduce traffic, improve the pedestrian and bicycle environment and relieve some of the strain on on-street parking.

On-going:

- 1. PTDM ordinance requires implementation of transportation demand management programs for all non-residential projects creating new parking.
- 2. Wherever streets are reconstructed, the City looks for opportunities to implement traffic calming and bicycle/pedestrian improvements.

Short-term (0-1 year):

- 1. "Tow Zone, No Stopping" signs have been installed on Western Avenue at Jay and Soden Streets to clear the edges of the intersections and improve sight lines.
- 2. Crosswalk at Kinnaird Street and Putnam Avenue has been relocated and widened to improve pedestrian safety at the crossing.
- 3. Crosswalks at Putnam Avenue at Green Street and at Putnam Avenue at Franklin Street have been repainted.
- 4. The City has committed to increase enforcement of illegal parking.
- 5. Signal timing/phasing at Sullivan Square will be improved to aid pedestrians.
- 6. The overhead signal indicating through movement on Green Street at River Street will be fixed so that the signal is clearly visible to drivers.
- 7. The City will study the impacts and benefits of prohibiting left turns from Flagg Street onto Memorial Drive, either during rush hour or throughout the day.
- 8. The City will develop signage to direct traffic during Riverbend Park street closings, such that unsuspecting drivers will not be detoured inappropriately through the residential neighborhood. The City will look into additional ways of providing route information to drivers.
- 9. Work with Harvard to address:
- a. Trucks obstructing sidewalk at DeWolfe/Mt. Auburn. Smaller delivery trucks would be less prone to obstructing the sidewalk, but would require more frequent deliveries. Harvard will discuss the possibility of using smaller trucks with each vendor.
- b. Better access for the general public on

shuttles

- c. Incentives for Harvard-affiliated residents to park off-street in Harvard facilities. The Committee suggests that Harvard reduce fees to a level which encourages affiliates to park off-street but does not encourage those who do not currently own or drive vehicles in the neighborhood to do so.
- 10. Add bike lane to Western Avenue.
- 11. Implement zoning ordinance banning through trucks in Cambridge between 11PM and 6AM except on Massachusetts Avenue. No changes would be made to current restrictions on River Street and Western Avenue.
- 12. Parking can be added to the other side of Banks Street. Before such a change is made, the City will notify residents and seek their feedback.

Mid- or Long-term:

- 1. Improve pedestrian safety and comfort at Pleasant Street/Western Avenue and Pleasant Street/River Street intersections.
- 2. Reduce speeding on River Street and Western Avenue through traffic calming.
- 3. Study feasibility of adding a pedestrianonly crossing of Memorial Drive between Western Avenue and DeWolfe Street.